CLAIMS

What is claimed is:

1. A method of predicting the likelihood of a vascular disease in an individual, comprising:
   a) obtaining a nucleic acid sample from the individual; and
   b) determining the genotype of the individual at nucleotide position 3949 of the thrombospondin-2 gene,
   wherein an individual who is homozygous for the variant allele has a decreased likelihood of a vascular disease as compared with an individual who is heterozygous or homozygous for the reference allele.

2. The method of Claim 1, wherein the thrombospondin-2 gene has the nucleotide sequence of SEQ ID NO: 1.

3. The method of Claim 1, wherein the vascular disease is selected from the group consisting of atherosclerosis, coronary heart disease, myocardial infarction, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism.

4. The method of Claim 3, wherein the vascular disease is myocardial infarction.

5. The method of Claim 3, wherein the vascular disease is coronary heart disease.

6. The method of Claim 1, wherein the variant allele comprises a G at nucleotide position 3949.

7. The method of Claim 1, wherein the reference allele comprises a T at nucleotide position 3949.

8. A method of predicting the likelihood of a vascular disease in an individual, comprising:
   a) obtaining a nucleic acid sample from the individual; and
   b) determining the genotype of the individual at nucleotide position 3949 of the thrombospondin-2 gene,

   wherein an individual who is heterozygous or homozygous for the reference allele has an increased likelihood of a vascular disease as compared with an individual who is homozygous for the variant allele.

9. The method according to Claim 8, wherein the thrombospondin-2 gene has the nucleotide sequence of SEQ ID NO: 1.

10. The method according to Claim 8, wherein the vascular disease is selected from the group consisting of atherosclerosis, coronary heart disease, myocardial infarction, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism.

11. The method according to Claim 10, wherein the vascular disease is myocardial infarction.

12. The method according to Claim 10, wherein the vascular disease is coronary heart disease.

13. The method of Claim 8, wherein the variant allele comprises a G at nucleotide position 3949.

14. The method of Claim 8, wherein the reference allele comprises a T at nucleotide position 3949.

15. A method of diagnosing or aiding in the diagnosis of a vascular disease in an individual, comprising:

a) obtaining a nucleic acid sample from the individual, and

b) determining the nucleotide present at nucleotide position 3949 of the thrombospondin-2 gene;

wherein presence of a T at nucleotide 3949 is indicative of an increased likelihood of a vascular disease in the individual, as compared with an individual having G at position 3949.

16. A method of Claim 15, wherein the vascular disease is selected from the group consisting of atherosclerosis, coronary heart disease, myocardial infarction, stroke, peripheral vascular diseases, venoms thromboembolism and pulmonary embolism.

17. A method of diagnosing or aiding in the diagnosis of a vascular disease in an individual, comprising:

a) obtaining a nucleic acid sample from the individual; and

b) determining the genotype of the individual at nucleotide position 3949 of the thrombospondin-2 gene,

wherein an individual who is homozygous for the variant allele has a decreased likelihood of a vascular disease as compared with an individual who is heterozygous or homozygous for the reference allele.

18. A method of Claim 17, wherein the vascular disease is selected from the group consisting of atherosclerosis, coronary heart disease, myocardial infarction, stroke, peripheral vascular diseases, venoms thromboembolism and pulmonary embolism.

19. A nucleic acid molecule comprising all or a portion of the nucleic acid sequence of SEQ ID NO: 1 wherein said nucleic acid molecule is at least 10 nucleotides in length and wherein the nucleic acid sequence comprises a polymorphic site at nucleotide position 3949 of SEQ ID NO: 1.

20. The nucleic acid molecule according to Claim 19, wherein the nucleotide at the polymorphic site is different from a nucleotide at the polymorphic site in a corresponding reference allele.

21. An allele-specific oligonucleotide that hybridizes to the nucleic acid molecule of Claim 19.